IN THE SPECIFICATION:

Please replace paragraphs 0045, 0046 and 0047 with the following:

[0045] It is within the purview of the present invention to employ more than one replaceable cartridge in performing the analytical procedures desired. In the embodiment depicted in FIG. 3, cartridge 28' contains a diluent or interlayer material and cartridge 28'' contains three different potential pharmaceutically active agents in chambers 29a, 29b and 29c.

[0046] Each cartridge has an integral memory device that provides information to the control electronics in controller 16 that is indicative of the cartridge contents. Each time a certain type or class of experiments is to be run, a new set of cartridges are loaded. The one-chamber and three-chamber cartridges above are only exemplary and it can be seen that an immense number different evaluations can be performed with the same system 10, depending upon the cartridges installed.

[0047] The controller 16 into which is installed a media 99 such as a CD-rom that contains information pertaining to a particular experiment. The electronics verify via the memory devices whether the installed cartridges correspond to the experiment being performed. ~~It~~ If not, a warning can be displayed to the user of system 10 of an improper match of cartridges and the experiment. Thus, system 10 is a flexible system that can be configured for a particular type of test via media and the cartridges.

Please replace paragraph 0053 with the following:

[0053] In this embodiment, the supply source 24 of the potential pharmaceutically active agent is maintained in a replaceable cartridge 28 having an appropriate supply vessel such as container 44. The container 44 may be a separate element which is capable of removable fluid contact with the replaceable cartridge 28. In such instances, the printhead may be an essentially permanent element associated with the test device or may be separately removable as depicted in FIGS. ~~35~~A and ~~35~~B.

Please replace paragraphs 0055, 0056 and 0057 with the following:

[0055] The test apparatus 10 of the present invention includes an container receiving station 48 in association with a controller such as controller 37. When the container ~~2844~~ is properly inserted into the container receiving station 48, an electrical and fluidic coupling is established between the container 44 and the printhead. The fluidic coupling allows the potential pharmaceutically active agent stored within the container 44 to be provided to suitable printhead 46. The electrical coupling allows information to be passed between the replaceable container 44 and the test apparatus portion 10 as needed to provide pertinent information regarding general operational information as well as potentially scientifically relevant data such as shelf life, lot number as well as detailed chemical and biological information.

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[0056] In the preferred embodiment, it is envisioned that controller 37 controls the transfer of information between the test apparatus 10 and the container 44. Finally the controller 37 also interactively cooperates with master controller 16 as through interface 42 to control relative movement of the container 44 and the test surface 40 as well as selectively activating the container 44 and connected printhead to dispense defined volumes of potential pharmaceutically active agent into contact with the individual units of samples containing cellular material.

[0057] The container 44 typically includes means for storing at least one potential pharmaceutically active agent therein. Storage chambers such as chamber 50 in container 44 typically provide capacity for maintaining a plurality of discrete materials in storage isolated from one another until dispensing is required. The container 44 may include suitable mixing means (not shown) upstream of fluid outlet 52. Alternatively mixing may occur as necessary or required at the printhead in suitable manner. As depicted in FIGS. 5A and 5B, the fluid outlet or outlets 52 are configured for connection to at least one complimentary fluid inlet 54 associated with the cartridge receiving station 48.

Please replace paragraph 0059 with the following:

[0059] Each replaceable printing component such as printhead and container 44 may include at least one suitable information storage device such as electrical storage device or memory 60, 60' for storing information relating to the associated replaceable component. A plurality of electrical contacts or linking portions 64 may be provided each of which is electrically connected to the electrical storage device 62. When the container 44 is properly inserted in the cartridge receiving station 48 of the test apparatus 10, each of the plurality of electrical contacts engage a corresponding plurality of electrical contacts 64 associated with the receiving station 48. Each of the plurality of electrical contacts 64 associated with the cartridge receiving station 48 are electrically connected to the controller 37 by a plurality of electrical conductors. With proper insertion of the cartridge 28 into the cartridge receiving station 48, the memory associated with the cartridge is electrically connected to the controller 37 allowing information to be transferred between the container 44 and the test apparatus 10. Similar communication can be achieved between the printhead and controller. While the foregoing discussion has been directed to a system having a discrete moveable printhead separate from the container, it is to be understood that a cartridge in which the two elements are integrally joined is preferred.

Please replace paragraph 0065 with the following:

[0065] The automated method of the present invention can be performed effectively on a plurality of defined volumes and/or concentrations of the substance containing cellular material. Each defined volume can include a plurality of individual volumes. These individual ~~defined~~ volumes positioned on the contact surface of the test substrate may be essentially identical to one another. In such cases, characteristics of the potential pharmaceutically active agent to be administered could be varied to provide a continuum of potential results. It is also possible that the individual volume is between about 1 and about 500 picoliters and that the content or specific characteristics of the substance containing cellular material may vary from individual volume to individual volume in a known predetermined manner. This variation could include, but is not limited to

characteristics such as cellular concentration, cellular age, concentration or contents of the carrier material, concentration characteristics of any indicator material present in the carrier material, or the like.